



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

5 Post Office Square, Suite 100

Boston, MA 02109-3912

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

JUL 30 2014

Mr. Kyle Murdock
President and CEO
Sea Hag Seafood Inc.
56 Mussel Farm Road
Tenants Harbor, ME 04860

**Re: Notice of Potential Violations and Administrative Order Pursuant to
Clean Air Act**

Dear Mr. Murdock:

On June 26, 2014, representatives of the United States Environmental Protection Agency Region 1 (EPA) conducted an Emergency Planning and Community Right-To-Know Act (EPCRA) and Clean Air Act Section 112(r) inspection at Sea Hag Seafood Inc. (hereinafter referred to as "the Facility" or "Sea Hag"). The Facility is located at 56 Mussel Farm Road in Tenants Harbor (a village in St. George, Knox County), Maine.

The primary purpose of the Clean Air Act inspection was to determine the Facility's compliance with the Act's "General Duty Clause" due to the presence of an anhydrous ammonia refrigeration system (System) at the Facility. Pursuant to the General Duty Clause, found at Section 112(r)(1) of the Act, 42 U.S.C. § 7412(r)(1), owners and operators of stationary sources producing, processing, handling, or storing substances listed pursuant to Section 112(r)(3) of the Clean Air Act, 42 U.S.C.

§ 7412(r)(3),¹ or any other extremely hazardous substance, have a general duty to:

- (1) identify hazards which may result from accidental releases of such substances, using appropriate hazard assessment techniques;
- (2) design and maintain a safe facility taking such steps as are necessary to prevent releases; and
- (3) minimize the consequences of accidental releases which do occur.

The General Duty Clause applies regardless of the amount of chemical stored. A guidance document that further explains the General Duty Clause may be found at www.epa.gov/emergencies/docs/chem/gdcregionalguidance.pdf.

¹ Anhydrous ammonia is one such listed substance.

Notice of Potential Violations

EPA inspectors found several dangerous conditions at the Facility, listed in the table below, that likely give rise to violations of the General Duty Clause. This list is not yet complete. Many of these conditions indicate that the Facility is not following industry standards of care that are common in the ammonia refrigeration industry.

Dangerous Condition	Potential GDC Violation	Examples of Industry Standard of Care
Lack of a hazard analysis that identifies hazards posed by the System.	Failure to identify hazards which may result from accidental releases of extremely hazardous substances, using appropriate hazard assessment techniques	The recommended industry practice and standard of care for ammonia refrigeration systems of this size would be to identify hazards using industry checklists, a What-if analysis, or a Hazard and Operability study. See e.g., the International Institute of Ammonia Refrigeration's ("IIAR's") <i>Ammonia Refrigeration Management Program</i> , Section 10; EPA's <i>Guidance for Implementation of the General Duty Clause Clean Air Act Section 112(r)(1)</i> , available at http://www.epa.gov/oem/docs/chem/gdcregionalguidance.pdf ; IIAR's <i>Process Safety Management Guidelines for Ammonia Refrigeration</i> ; IIAR Bulletin No. 110, <i>Start-up, Inspection and Maintenance of Ammonia Mechanical Refrigerating Systems</i> , Section 5.2.1 [The owner shall confirm that a Process Hazard Analysis has been completed and that recommendations have been resolved or implemented.]
Inadequate documentation available about the technology and equipment in the process. For example, the failure to have an accurate Piping and Instrumentation Diagram or a basic floor plan makes it very difficult to understand this complicated system.	Failure to identify hazards which may result from accidental releases, using appropriate hazard assessment techniques. Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.	IIAR's <i>Ammonia Refrigeration Management Program</i> , Section 3; IIAR Bulletin No. 109, <i>Minimum Safety Criteria for a Safe Ammonia Refrigeration System</i> , Section 4 [Safety Criteria]; IIAR Bulletin No. 110, <i>Start-up, Inspection and Maintenance of Ammonia Mechanical Refrigerating Systems</i> , Section 3 [Ammonia Characteristics and Hazards]; National Fire Prevention Association (NFPA) 1, <i>Fire Code</i> , Section 53.4.2 (2006 edition)
Inadequate training program (and training documentation) for safely operating, maintaining, and responding to releases from the System.	Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.	IIAR Bulletin No. 109, <i>Minimum Safety Criteria for a Safe Ammonia Refrigeration System</i> , Section 5.1 [Each plant should have an owner's appointed representative responsible for compliance with all refrigeration safety requirements.]; IIAR's <i>Ammonia Refrigeration Manual</i> , Section 2 [Management System], Section 9 [Training Program]; IIAR Bulletin No. 110, <i>Start-up, Inspection and Maintenance of Ammonia Mechanical Refrigerating Systems</i> , Section 5.2.3 [Training]

Dangerous Condition	Potential GDC Violation	Examples of Industry Standard of Care
Corroding piping and valves. Also, surface corrosion, pitting and flaking was noted on specific pipes and piping components, reducing the useful life of the equipment.	Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.	The industry standard of care calls for a <i>preventative</i> maintenance program. See e.g., IIAR's <i>Ammonia Refrigeration Manual</i> , Section 5 and Appendix 5.1; IIAR Bulletin No. 110, <i>Startup, Inspection and Maintenance of Ammonia Mechanical Refrigerating Systems</i> , Section 6.6 [Inspection and Maintenance – Valves and Sensing Devices] and Section 6.7 [Inspection and Maintenance – Piping]; IIAR Bulletin No. 109, <i>IIAR Minimum Safety Criteria for a Safe Ammonia Refrigeration System</i> , Sections 4.7.4 and 4.7.5 [4.7.4 --Uninsulated refrigerant piping should be examined for signs of corrosion. If corrosion exists, the pipe should be cleaned down to bare metal and painted with a rust prevention paint. Badly corroded pipe should be replaced. 4.7.5 –Insulated piping showing signs of vapor barrier failure should have the insulation removed and the pipe inspected....]; Section 53.5.1 and 53.5.3 of NFPA-1 (2006 edition)
The piping and valves are not labeled to indicate contents, direction of flow, physical state (i.e., liquid or vapor), pressure level (i.e., high or low), and there are no distinctive component markers for other system equipment (e.g., receivers, accumulator, etc.).	Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases. Failure to minimize the consequences of releases which do occur.	IIAR's <i>Ammonia Refrigeration Manual</i> , Section 4.2; IIAR Bulletin No. 109, <i>IIAR Minimum Safety Criteria for a Safe Ammonia Refrigeration System</i> , Section 4.7.6 [All ammonia piping should have appropriate pipe markers attached to indicate the use of the pipe and arrows to indicate the direction of flow, such as in IIAR Bulletin No. 114, "Guidelines for: Identification of Ammonia Refrigeration Piping and System Components"]; IIAR Bulletin No. 114, <i>Identification of Ammonia Refrigeration Piping and System Components</i> ; ANSI/IIAR 2-2008 (2012 ed.) ² , <i>Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems</i> , Section 10.6 [All piping mains, headers and branches shall be identified as to the physical state of the refrigerant (that is, vapor, liquid, etc.), the relative pressure level of the refrigerant, and the direction of flow. The identification system used shall either be one established as a standard by a recognized code or standards body or one described and documented by the facility owner.] ³
Main shut-off valve (King Valve) for receiver is not identified with a prominent sign and has the hand wheel removed so is not easily accessible. The system does not include remote	Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases. Failure to minimize the consequences of	IIAR Bulletin No. 109, <i>IIAR Minimum Safety Criteria for a Safe Ammonia Refrigeration System</i> , Section 4.10.3 [The main shut-off valve(s) (king valve(s)); hot gas defrost line main shut-off valve; and NH ₃ pump liquid main shut-off valve(s) and/or disconnects; of the ammonia system should be readily accessible and identified with a prominent sign having letters sufficiently large to be easily read.]; ANSI/ASHRAE 15-2010, <i>Safety Standard for Refrigeration Systems</i> , Section 11.2.2 [signage requirements for valves]

² The 2012 edition of ANSI/IIAR 2-2008 is cited throughout this document so that the company may use the latest version when correcting safety deficiencies. However, the edition in effect at the time the refrigeration system was installed was the 2010 edition. The citations and language have not changed from the 2010 to the 2012 edition unless otherwise noted in this chart.

³ This particular requirement was in Section 10.5 of the 2010 edition.

Dangerous Condition	Potential GDC Violation	Examples of Industry Standard of Care
shutdown and isolation capability.	releases which do occur.	
The machinery room doors were not adequately labeled to warn of the hazards of entering a room with ammonia-containing machinery.	Failure to minimize the consequences of releases which do occur.	ANSI/IIAR 2-2008 (2012 ed.), <i>Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems</i> , Section 13.1.10: In section entitled, "Entrances and Exits" is a requirement that refrigerating systems shall be provided with approved informative signs, emergency signs, charts and labels in accordance with NFPA 704. Hazard signs shall be in accordance with International Mechanical Code. Also see Section 13.1.2.4 (signs restricting entry to authorized personnel), 13.2.4.1 (signs with meaning of alarms); ANSI/IIAR 2-2008 (2012 ed.) Appendix L (examples of recommended machinery room door signage); ANSI/ASHRAE 15-2010, <i>Safety Standard for Refrigeration Systems</i> , Sections 8.11.2.1 (signs with meaning of alarms), 8.11.8 (signs restricting entry to authorized personnel), 11.2.4 (same), 11.7 (posted emergency shutdown procedures); Section 53.14 of NFPA-1 (2006 edition) and Section 53.19 of NFPA-1 (2006 edition) regarding storage of refrigerants, which references other applicable chapters of NFPA-1, which in turn would include 60.1.2.11.2.1 (hazard identification signs)
No remote emergency shutdown controls outside machinery room door.	<p>Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.</p> <p>Failure to minimize the consequences of releases which do occur.</p>	ANSI/ASHRAE 15-2010, <i>Safety Standard for Refrigeration Systems</i> , Section 8.12.i [Remote control of the mechanical equipment in the refrigerating machinery room shall be provided immediately outside the machinery room door solely for the purpose of shutting down the equipment in an emergency. Ventilation fans shall be on a separate electrical circuit and have a control switch located immediately outside the machinery room door.]; ANSI/IIAR 2-2008 (2012 ed.), <i>Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems</i> , Section 13.1.13.2 [A remote emergency shutdown control for refrigerant compressors, refrigerant pumps, and normally closed automatic refrigerant valves within the machinery room, shall be provided immediately outside the designated principle exterior machinery room door...] [ANSI/IIAR 2-2008 (2012 ed.) Section 13.3.1 [...The mechanical ventilation systems shall be powered independently of the machine room machinery and shall not be subject to emergency shutdown controls.]. See also Section 53.10.9 of NFPA-1 (2006 edition).
There is no fresh air intake to the machinery rooms that would allow adequate air exchange of the room for ventilation, and there is an inadequate normal and	Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.	ANSI/ASHRAE 15-2010, <i>Safety Standard for Refrigeration System</i> , Section 8.11.4 [Provision shall be made for inlet air to replace that being exhausted. Openings for inlet air shall be positioned to avoid recirculation...] ANSI/IIAR 2-2008 (2012 ed.), <i>Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems</i> , Section 13.3.8.1 [Normal mechanical ventilation design

Dangerous Condition	Potential GDC Violation	Examples of Industry Standard of Care
emergency exhaust system for the machinery rooms.	Failure to minimize the consequences of releases which do occur.	capacity shall be the greater of (a) 20 Air Changes per hour (20 ACH) based on the total gross volume of the machinery room. (b) The volume required to limit the room temperature to 104°F (40°C) taking into account the ambient heating effect of all machinery in the room and with the ventilation air entering the room at a 1% ASHRAE design....]; ANSI/IIAR 2-2008 (2012 ed.) Section 13.3.9.1 [Emergency mechanical ventilation systems shall be capable of providing at least one air change every two minutes, which is 30 air changes per hour (30 ACH) based on the gross machinery room volume.] ANSI/IIAR 2-2008 (2012 ed.) Section 13.3.9.2 [Emergency mechanical ventilation shall be actuated by (a) A refrigerant detector at a level not exceeding 1,000 ppm; (b) Manual controls.] Also see Sections 53.10.4 and 53.10.5 of NFPA-1 (2006 edition)
<p>The ammonia detector in the machinery room does not activate visual and audible alarms inside or outside the machinery room, nor does the detector activate the ventilation system.</p> <p>Also, there is only a single ammonia detector located in the first floor machinery room and a single detector in the second floor machinery room, and neither was operable.</p>	<p>Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.</p> <p>Failure to minimize the consequences of releases which do occur.</p>	<p>ANSI/IIAR 2-2008 (2012 ed.), <i>Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems</i>, Section 13.2 [Each refrigerating machinery room shall contain at least two refrigerant detectors that actuate an alarm and mechanical ventilation.] Section 13.2.1.2 [The detectors shall activate visual and audible alarms inside the refrigerating machinery room and outside each entrance to the refrigerating machinery room] Section 13.3.1 [Each refrigerating machinery room shall be vented to the outdoors by means of mechanical ventilation systems actuated automatically by refrigerant detectors....] Section 13.2.3 [requirements to have detectors activate alarms and emergency mechanical ventilation systems]; Section 13.3.9.2 [Emergency mechanical ventilation shall be actuated by (a) A refrigerant detector at a level not exceeding 1,000 ppm; (b) Manual controls.]; ANSI/ASHRAE 15-2010, <i>Safety Standard for Refrigeration System</i>, Section 8.11.2.1 [Each refrigerating machinery room shall contain a detector located in an area where refrigerant from a leak will concentrate that activates an alarm and mechanical ventilation. The alarm shall annunciate visual and audible alarms inside the refrigerating machinery room and outside each entrance to the refrigerating machinery room.]. Also see Section 53.11 of NFPA-1 2006 edition).</p>
No standard operating procedures available.	Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.	IIAR's <i>Ammonia Refrigeration Management Program</i> , Section 4 [describes purpose of standard operating procedures as providing concise and realistic descriptions of the procedures needed to operate equipment, and manage normal and abnormal situations]; and IIAR Bulletin No. 110 <i>Startup, Inspection and Maintenance of Ammonia Mechanical Refrigerating Systems</i> , Section 5.2.2 [Confirm that the operating procedures are complete and address steps for each operating phase. Ensure that the operating

Dangerous Condition	Potential GDC Violation	Examples of Industry Standard of Care
		procedures include operating limits, safety and health considerations, and safety systems and their functions....]
<p>Presence of combustible materials in machinery room.</p> <p>The first and second-floor machinery rooms are constructed with wood, particle board, and drywall. Neither room has a fire suppression system.</p>	<p>Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.</p> <p>Failure to minimize the consequences of releases which do occur.</p>	<p>ANSI/IIAR 2-2008 (2012 ed.), <i>Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems</i>, Section 13.1.3.1 [Flammable and combustible materials shall not be stored in machinery rooms.]; Section 13.1.1.3 [Walls, floors, and ceilings shall be of non-combustible construction. Walls, floors, and ceilings separating the machinery room from other occupied spaces shall be of at least one-hour fire resistive construction unless the building is equipped with an automatic fire sprinkler system.]; ANSI/ASHRAE 15-2010, <i>Safety Standard for Refrigeration System</i>, Section 8.12.c [Walls, floor, and ceiling shall be tight and of noncombustible construction—walls, floor, and ceiling separating the refrigerating machinery room from other occupied spaces shall be of at least one-hour fire-resistive construction.]. Also see Section 53.10.8.2 of NFPA-1 (2006 edition).</p>
<p>The machinery room is cramped for space.</p>	<p>Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.</p>	<p>ANSI/IIAR 2-2008 (2012 ed.), <i>Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems</i>, Section 13.1.2.2 [A clear and unobstructed approach and space shall be provided to refrigerating machinery for inspection, service, and emergency shutdown with adequate clearances for maintenance of equipment]; ANSI/ASHRAE 15-2010, <i>Safety Standard for Refrigeration System</i>, Section 9.12.1 [All serviceable components of refrigerating systems shall be provided with safe access.]</p>
<p>The second floor machinery room's door does not create a tight seal.</p>	<p>Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.</p>	<p>ANSI/IIAR 2-2008 (2012 ed.), <i>Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems</i>, Section 13.1.10 [Each refrigerating machinery room shall have a tight-fitting door or doors opening outward, self-closing if they open into the building, and adequate in number to ensure freedom for persons to escape in an emergency—doors communicating with the building shall be approved, self-closing, tight-fitting fire doors equipped with panic-type hardware—the refrigerating machinery room shall have a door that opens directly to the outside air or through a vestibule equipped with self-closing, tight-fitting doors equipped with panic-type hardware]; IIAR Bulletin No. 112, <i>Ammonia Machinery Room Design</i>, Section 4.2.1(b) [A minimum of two (2) exits must be provided from the machinery room, and all exits shall be in compliance with all federal, state and local codes and regulations—exit doors shall swing outward, be equipped with panic-type hardware, and shall not be locked while machinery room is occupied—doors shall be tight-</p>

Dangerous Condition	Potential GDC Violation	Examples of Industry Standard of Care
		fitting, and self-closing.]; ANSI/ASHRAE 15-2010, <i>Safety Standard for Refrigeration System</i> , Section 8.12.d. [The refrigerating machinery room shall have a door that opens directly to the outdoors or through a vestibule equipped with self-closing, tight-fitting doors.]
Exposed electrical wires and open electrical boxes were observed in the machinery rooms.	<p>Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.</p> <p>Failure to minimize the consequences of releases which do occur.</p>	ANSI/IIAR 2-2008 (2012 ed.), <i>Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems</i> , Section 13.1.7 Electrical Safety; Section 53.10.7 and 53.12 of NFPA-1 (2006 edition); and IIAR Bulletin 109, <i>Minimum Safety Criteria for a Safe Refrigeration System</i> , General Safety checklist, item (x).
No emergency eyewash and shower stations in or near the machinery rooms.	Failure to minimize the consequences of releases which do occur.	ANSI/IIAR 2-2008 (2012 ed.), <i>Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems</i> , Section 13.1.6 [An eyewash and body shower unit shall be located external to the machinery room and readily accessible via an exit.]
No documented mechanical integrity program in place for the ammonia refrigeration system.	Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.	IIAR Bulletin No. 110, <i>Start-Up, Inspection and Maintenance of Ammonia Mechanical Refrigerating Systems</i> , Section 6.0 [For any particular refrigerating system, the inspection and maintenance program shall account for specific recommendations for the equipment comprising that system, found in the supplier's instructions manual and relevant supplementary information. The type and frequency of inspection and maintenance will also depend on the effectiveness of previous maintenance, the age of the system, the environment in which the system is located and the duty of the system.]; IIAR's <i>Ammonia Refrigeration Management Program</i> Section 5, which recommends documenting regular inspections; IIAR Bulletin 109, <i>Minimum Safety Criteria for a Safe Refrigeration System</i> , checklists and Section 5; and Section 53.15 of NFPA-1 (2006 edition).
Inadequate emergency action plan.	Failure to minimize the consequences of releases which do occur.	IIAR's <i>Ammonia Refrigeration Management Program</i> Section 7 (2005): Refrigeration facilities should develop an up-to-date, facility-specific emergency action plan that accurately describes the facility and the potentially affected population. Such a plan should include, among other items: types of evacuation, evacuation procedures and routes, procedures for employees who remain to maintain critical operations, procedures for accounting for evacuated employees, any employee rescue and medical duties, and means for reporting emergencies. An adequate emergency response program should also identify procedures for responding to an ammonia release, including shutting the system down, starting emergency ventilation, and

Dangerous Condition	Potential GDC Violation	Examples of Industry Standard of Care
		coordinating with all relevant off-site emergency responders.

In addition to the above list, the EPA inspectors observed open floor drains in the first floor machinery room, drainage from which could reach nearby surface water (Long Cove). An accidental ammonia or oil leak in this area thus could violate the Clean Water Act.

This letter is EPA's initial response to deficiencies observed during EPA's inspection. Additional concerns may be uncovered as EPA continues to review the Facility's compliance records. Also, this letter does not limit or otherwise preclude EPA from taking civil or criminal enforcement action pursuant to CAA Section 113, 42 U.S.C. § 7413, with regard to these or other potential violations.

To improve the safety of your operations, protect staff and neighbors, and make headway towards compliance, EPA urges you to take immediate positive steps to remedy the above-cited deficiencies throughout the Facility. The hazards analysis/review ordered by the enclosed Administrative Order (discussed below) should help you prioritize the order in which you perform work to make the System safer. However, there are certain safety steps you must take within 45 days. As required in the enclosed Administrative Order, these steps include conducting a hazard analysis, developing an adequate emergency action plan and/or response procedures with input from local and state emergency planners and responders, properly sealing open electrical wires within the Machinery Rooms to avoid igniting any released ammonia vapors, installing adequate ammonia detectors and alarm systems, adding piping and component labels and tags, and adding machinery room door signage.

Administrative Order

As described above, EPA is prioritizing a few items you must fix immediately. Accordingly, as explained in the enclosed Notice of Violation and Administrative Order, **EPA finds that Sea Hag has violated the General Duty Clause, 42 U.S.C. § 7412(r)(1), by failing to:**

- (1) identify hazards which may result from accidental releases of such substances, using appropriate hazard assessment techniques (by not having a process hazard analysis/review); and
- (2) minimize the consequences of releases (by not providing information to emergency responders about Sea Hag's ammonia inventory before 2014, not having an adequate emergency plan, not having adequate detector and alarm systems, having open electrical wires that could ignite released ammonia vapors, and not having proper emergency response labels and signage in and around the machinery room).

The Administrative Order requires Sea Hag to correct these violations within 45 days, with the help of an ammonia refrigeration expert. It is likely that EPA will take steps to address the other dangerous conditions once you have submitted your hazard analysis.

Should EPA's order conflict with any work that the Town of St. George may require regarding the refrigeration system, please let EPA know so that all the parties can plan and prioritize accordingly. Also, please ensure that any work Sea Hag or its contractors conduct on the refrigeration system complies with codes, standards, and guidelines recognized as generally accepted good engineering practices so that such work does not inadvertently create more hazards. If you have any questions regarding this letter, please contact Jim Gaffey or Catherine Smith, Esq. of my staff, respectively, at (617) 918-1753 or (617) 918-1777.

Sincerely,



Susan Studlien, Director
Office of Environmental Stewardship

cc: Dan Engel, Sea Hag Seafood Inc.
Catherine Smith, EPA
Jim Gaffey, EPA
Timothy C. Polky, Chief, Town of St. George Fire Department
Fred Mallaby, OSHA
Kurt Tidd, ME-DEP
Bruce Fitzgerald, SERC

Enclosures:

- (1) Notice of Violation and Administrative Order
- (2) Small Business Resources sheet
- (3) Inspection report with photographs and photo log

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1 – NEW ENGLAND**

IN THE MATTER OF

Sea Hag Seafood, Inc.
56 Mussel Farm Road
Tenants Harbor, ME 04860

Proceeding under Section
113 of the Clean Air Act

**NOTICE OF VIOLATION AND
ADMINISTRATIVE ORDER**

INTRODUCTION

1. The United States Environmental Protection Agency Region 1 (“EPA”) issues this Notice of Violation and Administrative Order (“NOV/AO”) to Sea Hag Seafood, Inc. (“Respondent”) for Respondent’s failure to comply with Section 112(r)(1) of the Clean Air Act (“CAA”), 42 U.S.C. § 7412(r)(1), in the handling of anhydrous ammonia at the company’s Tenants Harbor, Maine facility where it runs a seafood processing facility.

2. The AO is issued under the authority of Section 113 of the CAA, 42 U.S.C. § 7413. Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), provides that EPA may issue an order requiring compliance with the requirements or prohibitions of Subchapter I of the Act (which include, among other things, the requirements of Section 112(r), 42 U.S.C. § 7412(r)).

STATUTORY AND REGULATORY AUTHORITY

3. Pursuant to Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), owners and operators of stationary sources producing, processing, handling, or storing substances listed pursuant to Section 112(r)(3) of the CAA, 42 U.S.C. § 7412(r)(3), or any other extremely hazardous substance, have a general duty, in the same manner and to the same extent as 29 U.S.C. § 654, to (a) identify hazards which may result from accidental releases of such substances using appropriate hazard assessment techniques; (b) design and maintain a safe facility taking such steps as are necessary to prevent releases; and (c) minimize the consequences of accidental releases which do occur. This section of the CAA is referred to as the "General Duty Clause."

4. The extremely hazardous substances listed pursuant to Section 112(r)(3) include, among others, anhydrous ammonia.

5. The term "accidental release" is defined by Section 112(r)(2)(A) of the CAA, 42 U.S.C. § 7412(r)(2)(A), as an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.

6. Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3), authorizes EPA to issue compliance orders for violations of the Act, including violations of Section 112(r), 42 U.S.C. § 7412(r). A copy of the order must be sent to the relevant State air pollution control agency. An order relating to a violation of Section 112 of the CAA can take effect immediately upon issuance.

GENERAL ALLEGATIONS

7. Respondent operates a facility located at 56 Mussel Farm Road in Tenants Harbor, Maine, where it runs a seafood processing facility (the "Facility").

8. The Facility is located in a coastal position on Long Cove, in Tenants Harbor, which is a village in the Town of St. George. There are a number of residences in the vicinity of the Facility.

9. Respondent is a corporation registered to do business in Maine and is thus a "person" within the meaning of Section 302(e), against whom an Administrative Order may be issued under Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3).

10. Respondent operates a "stationary source" as that term is defined at Section 112(r)(2)(C) of the CAA, 42 U.S.C. § 7412(r)(2)(C).

11. The Facility has a refrigeration system, which cycles approximately 4,500 pounds of anhydrous ammonia through various physical states to cool and freeze Respondents' seafood products. Additionally, Respondent stores approximately 3,000 pounds of anhydrous ammonia in an attached shed in a free-standing high pressure receiver. Accordingly, Respondent "stores" and "handles" anhydrous ammonia, which, as indicated in paragraph 4 above, is an "extremely hazardous substance" subject to the General Duty Clause.

12. Anhydrous ammonia is a clear, colorless gas at atmospheric conditions of temperature and pressure with a strong odor. It is often stored and shipped under pressure as a liquid. It presents a significant health hazard because it is corrosive to the skin, eyes, and lungs. Ammonia vapors may be fatal if inhaled. Exposure to 300 parts per million by volume is immediately dangerous to life and health. Ammonia gas is

generally regarded as nonflammable but does burn at concentrations of approximately 15.5% to 27% by volume in air with strong ignition. It can explode if released in an enclosed space with a source of ignition present or if a vessel containing anhydrous ammonia is exposed to fire. The fire hazard increases in the presence of oil or other combustible materials.

13. Due to the dangers associated with anhydrous ammonia, the ammonia refrigeration industry has developed industry standards to control the risks associated with the use of ammonia. In collaboration with the American National Standards Institute, the International Institute of Ammonia Refrigeration ("IIAR") has issued (and updates) "Standard 2: Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems," along with other applicable standards and guidance. For example, to provide streamlined guidance to facilities like Respondent's that have less than 10,000 pounds of ammonia, in 2005 IIAR published the "Ammonia Refrigeration Management Program" (2005). Also in collaboration with the American National Standards Institute, the American Society of Heating, Refrigerating and Air-Conditioning Engineers has issued (and updates) "Standard 15: Safety Standard for Refrigeration Systems." These standards are consistently relied upon by refrigeration experts and are sometimes incorporated by reference into state building, mechanical, and fire codes, including Maine's codes.

14. On June 26, 2014, duly authorized EPA inspectors visited the Facility to determine whether Respondent was complying with Section 112(r) of the CAA and the Emergency and Community Right-to-Know Act. The EPA inspector interviewed the company's president and took a walking tour of the Facility's main building, which

houses office space, first floor and second floor machinery rooms where some of the refrigeration system machinery is located (“Machinery Rooms”), the seafood processing area, and an attached wooden shed on the east side of the building where the disconnected additional anhydrous ammonia is stored. On July 2, 2014, the EPA inspector had a telephone conversation with the company’s safety officer (on vacation at the time of the inspection site visit) to obtain some additional information regarding the anhydrous ammonia system.

15. The EPA inspector observed that Respondent’s ammonia refrigeration system (“System”) had several components, some of which are described below:

- a. **Evaporators:** These are the units in which the ammonia is allowed to evaporate (at a low -28° F boiling point), drawing and absorbing the heat from a room as the ammonia evaporates, thereby cooling the room.
- b. **Compressors:** After being allowed to evaporate, ammonia gas flows at low pressure to a compressor where it is pressurized into a liquid. This compression process also raises the temperature of the gas. Oil is used in the compressors to help seal them and lubricate the compressor’s parts, and used oil must be regularly removed from the compressors.
- c. **Condenser:** Heated vapor at high pressure flows from a compressor to the condenser, where refrigerant vapor flows through the condenser’s heat exchanger. The heat exchanger cools the vapor and condenses it into a liquid. From here, the liquid typically flows at high pressure into a receiver, where it is stored.
- d. **Receivers:** These are tanks that have the function of (a) collecting ammonia after the condensing stage, (b) storing most of the ammonia in a typical refrigeration system, and (c) sending the ammonia out to the evaporators. Due to their capacity to release large amounts of ammonia if breached, it is important to maintain the integrity of the receivers and associated valves. Respondent’s System had at least one receiver located in the first floor Machinery Room.
- e. **Pumps and valves:** The System has multiple pumps and valves to move and the control the flow of ammonia through the System. Receivers have “king valves” that can be used to stop the flow of ammonia from the receivers to the rest of the System during an emergency. Closing the king

valve will essentially turn off an ammonia system, thus shortening the duration of any continuing ammonia releases. Often solenoid valves near these king valves can be activated by emergency switches outside the building so that emergency responders do not have to enter a building filled with ammonia vapors to turn off a system.

- f. **Piping:** Pipes throughout the Facility and on the roof carry ammonia in all its various physical states.
- g. **Ammonia detectors:** These devices, typically placed in machinery rooms, detect ammonia vapors that have been released at certain concentrations. They typically also activate alarms to warn employees and emergency responders of a release. It is essential for detectors to be properly placed, maintained, calibrated, and connected to alarms and ventilation systems so that they can fulfill their function. Respondent's Facility had one detector in the first floor Machinery Room and one in the second floor Machinery Room, but neither detector was operable at the time of the Inspection.
- h. **Emergency controls:** An emergency control box, typically placed outside the designated Machinery Room door, allows emergency responders to control releases by actuating key refrigeration system equipment, such as compressors and the king valves. There should be a remote emergency switch for ventilation as well. The Facility has no emergency control boxes outside the either the first or second floor Machinery Room access door.

16. During the Inspection, the EPA Inspector observed some potentially dangerous conditions relating to the System, including the following:

- a. **Facility personnel have an inadequate training program for safely operating, maintaining, and responding to releases from the System:**

The company's president and safety officer operate and maintain the System with help from a local independent ammonia refrigeration technician but they could not provide documentation of their training on the System. Also, the president responded to a small ammonia release at the Facility using a respirator but stated that he had no documented emergency responder training.

- b. ***Inadequate information available about System:*** Inadequate documentation was available about the technology and equipment of the ammonia refrigeration system. For example, there was no Process and Instrumentation Diagram or floor plan that would allow Facility personnel, inspectors, or emergency responders to identify the location of key System equipment, piping, and valves).
- c. ***Rusting/corroding pipes and valves:*** There were rusting and corroding pipes and valves in many locations, creating a risk that the valves and pipes could further deteriorate and break, releasing ammonia.
- d. ***Machinery Room is cramped for space:*** The EPA Inspector observed that the refrigeration equipment in the first floor machinery room is very tightly installed in the space, allowing little room between and around equipment for access for inspection, testing, and maintenance.
- e. ***Unlabeled equipment, valves, and piping:*** The EPA Inspector observed unlabeled ammonia equipment, valves, and piping throughout the entire Facility, impeding the ability of Facility personnel, contractors, inspectors, and emergency responders to identify which components contained ammonia, and which valves performed what functions. For example, the king valve on the high pressure receiver was not labeled and was missing the hand wheel.
- f. ***Inadequate emergency shutdown controls:*** There are no emergency shutdown controls adjacent to either the first or second floor Machinery Room door. The lack of appropriate emergency shut-offs creates a risk of

harm to workers and emergency responders, who cannot quickly shut down or properly ventilate the machinery room without entering a machinery room, which room could have dangerous levels of ammonia vapors. The delay could also contribute to a longer ammonia release time, exacerbating risks to workers, emergency responders, and people off-site.

- g. ***No documented mechanical integrity program:*** The EPA inspector noted that the company has no documented program to maintain the mechanical integrity of the refrigeration equipment. Such a program should identify which process equipment to include, develop and implement written procedures, provide training, schedule and perform inspection and testing of the equipment, resolve equipment deficiencies, and perform quality assurance for the program.
- h. ***Vessel of ammonia dangerously stored in attached wooden shed:*** A pressure vessel of anhydrous ammonia, containing approximately 3,000 pounds, was stored inside a wooden shed attached to the east side of the building. Ammonia should not be stored near combustible materials.
- i. ***No standard operating procedures:*** The EPA inspector noted that there were no written standard procedures to operate the refrigeration system.
- j. ***Inadequate normal and emergency ventilation system in machinery room:*** The EPA Inspector observed no inlet for outside air to enter the first floor Machinery Room other than through three open vent pipes through the floor, which likely would not provide an air sweep of the room. There was no operational inlet for outside air in the second floor

Machinery Room. The company's president indicated the first floor Machinery Room is typically operated with the outside door open, using a small portable fan to move air. Without adequate ventilation, vapors are more likely to build up to levels that are hazardous to human health or that risk causing fire or explosion.

- k. ***Lack of adequate ammonia vapor detection equipment:*** A single ammonia detector is mounted in both the first floor and the second floor Machinery Rooms, but neither detector was operable at the time of the Inspection. The latest industry standard is to have two ammonia detectors in a machinery room. The ammonia detectors were not connected to any ventilation system or to any audio-visual alarm to activate them in the event of a leak.
- l. ***No warning signs and alarms on/near Machinery Room door:*** Neither Machinery Room door had adequate labeling to warn people of the hazards of entering into a room with ammonia-containing machinery. Nor were there audio/visual alarms near either Machinery Room door to warn people about any ammonia leaks inside the Machinery Rooms. Also, the egress door from the second floor Machinery Room does not exit outdoors.
- m. ***Presence of potential ignition sources and combustible materials in machinery room:*** Ammonia vapors are flammable at certain concentrations, which means that machinery rooms with ammonia-containing equipment need to be kept as free as possible of combustible

materials to reduce the risk of a fire or explosion. The EPA inspector observed that the machinery rooms were constructed with combustible wood and particle board materials. Additionally, several open electrical boxes and unsecured electrical wires were observed in both Machinery Rooms, which could ignite any released ammonia fumes.

- n. ***No fire suppression system in machinery room:*** There was no fire suppression system in either Machinery Room, although portions of the Machinery Room were constructed of wood, a combustible material. Due to the flammability of ammonia vapors at certain concentrations, it is dangerous for a Machinery Room to be constructed of combustible materials unless there is an adequate fire suppression system.
- o. ***Lack of emergency eye wash and shower stations:*** There were no emergency eye wash and shower facilities inside or outside either exit from the Machinery Rooms.
- p. ***No windsocks:*** There were no windsocks at the Facility to indicate wind direction and relative wind speed in the event of an accidental release of ammonia.
- q. ***Inadequate emergency action plan or coordination with fire department:***
The EPA inspector learned that the Respondent had not reported the presence and amounts of ammonia (or other chemicals) to emergency response and planning agencies as required by the Emergency Planning and Community-Right-to-Know Act. Also, the Facility's emergency response procedures are inadequate because, among other things, it is

unclear what responsibilities or training each employee involved in an emergency response has; what arrangements have been made for medical care; what emergency equipment is available to respond to an emergency; and what arrangements have been made with local emergency responders. Also, the Facility's Emergency Action Plan describes emergency action routes, but those routes are not posted around the Facility, and the Plan directs employees to blow air horns in the event of fire but does not indicate where those are located.

NOTICE OF VIOLATION

I. FAILURE TO IDENTIFY HAZARDS

17. The allegations in Paragraphs 1 through 16 are hereby realleged and incorporated herein by reference.

18. Pursuant to the General Duty Clause, Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), owners and operators of stationary sources producing, processing, handling or storing extremely hazardous substances have a general duty, in the same manner and to the same extent as Section 654 of Title 29, to identify hazards which may result from accidental releases of such substances. The recommended industry practice and standard of care for ammonia refrigeration systems of this size would be to identify hazards using industry checklists, a What-if analysis, or a Hazard and Operability study. See, for example, the International Institute of Ammonia Refrigeration's ("IIAR's") *Ammonia Refrigeration Management Program*, Section 10; IIAR's Bulletin No. 110, *Startup, Inspection, and Maintenance of Ammonia Mechanical Refrigeration Systems*,

Section 5.2.1; EPA's *Guidance for Implementation of the General Duty Clause Clean Air Act Section 112(r)(1)*, available at <http://www.epa.gov/oem/docs/chem/gdcregionalguidance.pdf>; and IIAR's *Process Safety Management Guidelines for Ammonia Refrigeration*.

19. As described in Paragraph 16 above, the EPA inspector observed potentially dangerous conditions at the Facility that indicated a failure to identify hazards associated with the ammonia refrigeration system. Moreover, Respondent was not able to produce any process hazard analysis while the EPA inspector was at the Facility or subsequently when requested in a telephone conversation between the Facility's safety coordinator and EPA's inspector.

20. Accordingly, Respondent has violated the General Duty Clause's requirement to identify hazards associated with the refrigeration system using industry-recognized hazard assessment techniques, in violation of Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1).

II. FAILURE TO MINIMIZE THE CONSEQUENCES OF ACCIDENTAL RELEASES THAT DO OCCUR

21. The allegations in Paragraphs 1 through 20 are hereby realleged and incorporated herein by reference.

22. Pursuant to the General Duty Clause, Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), owners and operators of stationary sources producing, processing, handling, or storing extremely hazardous substances have a general duty to minimize the consequences of any accidental releases of anhydrous ammonia which do occur.

23. As described above in Paragraph 16(q), at the time of the Inspection, Respondent had not notified emergency planners or responders about the amount of

ammonia on site. Also, as more fully described in Paragraph 16(q), Respondent did not have an adequate emergency response program, including an up-to-date emergency action plan that addressed release scenarios based on hazards associated with the design, location, and operation of the Facility. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to have a hazard assessment that identifies potential release scenarios and their impacts and to develop an up-to-date, facility-specific emergency action plan. Such a plan should include, among other items: types of evacuation, evacuation procedures and routes, procedures for employees who remain to maintain critical operations, procedures for accounting for evacuated employees, any employee's rescue and medical duties, and means for reporting emergencies. See, e.g., EPA's Guidance for Implementation of the General Duty Clause Clean Air Act Section 112(r)(1) at 16; Int'l Inst. of Ammonia Refrigeration, Ammonia Refrigeration Management Program § 7 (2005) [hereinafter, "IIAR ARM"]. An adequate emergency response program should also identify emergency equipment and procedures for responding to an ammonia release, including shutting the system down, starting emergency ventilation, and coordinating with relevant off-site emergency responders. See, e.g., id.

24. In addition, many of the allegations in Paragraph 16,¹ including, but not limited to, those in subparagraphs e, k, l, and m (lack of appropriate vapor detection systems tied to exhaust fans and audio/visual alarms; lack of signage and labels for machinery room doors, piping, and equipment; and presence of electrical hazards in

¹ Many of these allegations also would support a finding that Respondent violated yet another General Duty Clause requirement – the requirement to design and maintain a safe facility so as to prevent releases -- but this NOV/AO focuses on the two violations that EPA would like Respondent to fix immediately.

machinery rooms) describe deficiencies that reflect a failure to minimize the consequences of any accidental release of ammonia. Each of these shortcomings could exacerbate the negative effects of any release of ammonia that does occur at the Facility. The most recent industry standard for ammonia refrigeration systems is to have at least two refrigerant detectors in a machinery room and to have them actuate mechanical ventilation as well as visual and audible alarms both inside the Machinery Room and at each of its entrances. See, e.g., IIAR 2-2008 (2012 ed.), supra, § 13.2 (requires at least two detectors that activate alarm and mechanical ventilation). See also ASHRAE 15-2010, supra, § 8.11.2.1 (requires a detector located in area where refrigerant will congregate that activates alarm and ventilation); and Section 53.11 of National Fire Prevention Association (NFPA) 1, *Fire Code*, (2006 edition). Also, the recommended industry practice and standard of care for ammonia refrigeration systems of this size is to post signs warning of the presence of ammonia, restricting entry to authorized personnel, explaining the meaning of the alarms and the emergency shutdown process at each entrance to the Machinery Room, see, e.g., IIAR 2-2008 (2012 ed.), supra, §§ 13.1.2.4 (restricting entry to authorized personnel), 13.2.4.1 (meaning of alarms); App. L (summarizing signage and providing examples); ASHRAE 15-2010, supra, §§ 8.11.2.1 (meaning of alarms), 8.11.8 (restricting entry to authorized personnel), 11.2.4 (same), 11.7 (emergency shutdown procedures). There are also recommended industry standards for labeling piping and equipment. See, e.g., IIAR's Ammonia Refrigeration Manual, Section 4.2; IIAR Bulletin No. 109, *IIAR Minimum Safety Criteria for a Safe Ammonia Refrigeration System*, Section 4.7.6 [All ammonia piping should have appropriate pipe markers attached to indicate the use of the pipe and arrows to indicate the direction of

flow, such as in IIAR Bulletin No. 114, “Guidelines for: Identification of Ammonia Refrigeration Piping and System Components”]; IIAR Bulletin No. 114, *Identification of Ammonia Refrigeration Piping and System Components*; ANSI/IIAR 2-2008 (2012 ed.)², *Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems*, Section 10.6 [All piping mains, headers and branches shall be identified as to the physical state of the refrigerant (that is, vapor, liquid, etc.), the relative pressure level of the refrigerant, and the direction of flow. The identification system used shall either be one established as a standard by a recognized code or standards body or one described and documented by the facility owner.]³ Finally, industry standards recommend safe electrical practices. See e.g., ANSI/IIAR 2-2008 (2012 ed.), *Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems*, Section 13.1.7 Electrical Safety; Section 53.10.7 and 53.12 of NFPA-1 (2006 edition); and IIAR Bulletin 109, *Minimum Safety Criteria for a Safe Refrigeration System*, General Safety checklist, item (x) [checklist item asking whether covers are securely fastened to electrical panels and junction boxes].

25. Accordingly, Respondent violated the requirement to minimize the consequences of any accidental release of anhydrous ammonia which does occur, as required under the General Duty Clause, Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), by failing to: notify emergency planners and responders about the presence and amount of ammonia on-site; provide information about ammonia inventory to

² The 2012 edition of ANSI/IIAR 2-2008 is cited throughout this document so that Respondent may use the latest version when correcting safety deficiencies. However, the edition in effect at the time the refrigeration system was installed was the 2010 edition. The citations and language have not changed from the 2010 to the 2012 edition unless otherwise noted in this chart.

³ This particular requirement was in Section 10.5 of the 2010 edition.

emergency planners and responders; develop and implement adequate emergency response procedures; have adequate detector and alarm systems; have proper signage on machinery room doors, piping, and System components; and control electrical hazards.

ADMINISTRATIVE ORDER

26. It is hereby ordered that Respondent shall take the following actions:

(a) **As soon as possible, but no later than fourteen (14) days after the effective date of this Order**, Respondent shall:

- (i) engage a third-party ammonia refrigeration system expert (“Refrigeration Expert”) to help conduct the work required by this Order and Reporting Requirement, and
- (ii) submit the Refrigeration Expert’s resume and qualifications to EPA.

The Refrigeration Expert shall have experience conducting process hazard analyses under CAA Section 112(r), be very knowledgeable about the industry codes and standards that apply to ammonia refrigeration facilities, and have experience designing refrigeration systems to meet such codes and standards (or have access to someone who does have such design experience).

(b) **As soon as possible, but no later than 45 days after the effective date of this Order**, Respondent shall:

- (i) Conduct and submit a process hazard analysis/review to correct the violation cited in Count I above. This process hazard analysis/review shall follow industry standards and guidance and include an assessment of the refrigeration systems and the design of the Machinery Rooms. See, e.g.,

IIAR's ARM, Section 10 (Hazard Review Procedures) and other documents cited in Paragraph 23. The assessment shall include an analysis of whether the design of the refrigeration systems complies with current generally recognized and accepted good engineering practices and whether the refrigeration equipment is maintained, inspected, tested and operated in a safe manner. See, e.g., IIAR's ARM Section 10.3 (Hazard Review), which recommends completing safety checklists contained in Appendix 10.1 and IIAR Bulletin 109. Include the Refrigeration Expert's recommendations for addressing hazards and a schedule for implementing those recommendations.

(ii) To correct the violations cited in Count II above, in accordance with industry standards and guidance, develop and implement an adequate emergency response plan; install adequate detector and alarm systems; install proper signage and labeling on machinery room doors, piping, and System components; seal open electrical wires; and close electrical boxes.

27. Notice: Respondent shall submit all notices, schedules, work plans, analyses, certification, and documentation required by this order to:

Jim Gaffey
RCRA, EPCRA, and Federal Programs Unit (SER)
Office of Environmental Stewardship
EPA Region 1
Mail Code: OES05-1
5 Post Office Square, Suite 100
Boston, MA 02109-3912

ENFORCEMENT

28. At any time after the issuance of this AO, EPA may take any or all of the following actions: issue a further order requiring compliance with the Act; issue an administrative penalty order for up to \$37,500 per day for each violation; or bring a civil or criminal action seeking an injunction and penalties. See Sections 113(a)-(d) of the CAA, 42 U.S.C. §§ 7413(a)-(d); 40 C.F.R. Part 19; and 78 Fed. Reg. 66643-66648 (November 6, 2013) (CAA penalties raised from \$25,000 to \$32,500 for violations occurring between March 15, 2004 and January 12, 2009, and to \$37,500 for violations occurring thereafter). Be advised that Section 113(e)(2) of the Act, 42 U.S.C. § 7413(e)(2), contains provisions that affect the burden of proof with respect to violations which continue following issuance of a Notice of Violation.

29. Be advised that issuance of this NOV/AO does not preclude EPA from electing to pursue any other remedies or sanctions authorized by law that are available to address these and other violations. This NOV/AO does not resolve Respondent's liability for past violations of the Act or for any violations that continue from the date of this NOV/AO up to the date of compliance.

30. Neither EPA nor the United States, by the issuance of this NOV/AO, assumes any liability for any acts or omissions by Respondent or Respondent's employees, agents, contractors or consultants engaged to carry out any action or activity pursuant to this NOV/AO; nor shall EPA or the United States be held as a party to any contract entered into by Respondent or Respondent's employees, agents, contractors or consultants engaged to carry out the requirements of this NOV/AO.

EFFECTIVE DATE AND APPLICABILITY

31. The NOV/AO shall take effect **within fourteen days of receipt**. The AO shall apply to Respondent, its officers, agents, servants, employees, successors and assigns, and to all persons, firms and corporations acting under, through or for Respondents. This action is not subject to Office of Management and Budget review under the Paperwork Reduction Act, 44 U.S.C. Chapter 35.

32. If Respondent has any questions regarding this NOV/AO, please contact Jim Gaffey at (617) 918-1753, or have your legal counsel contact Catherine Smith, Senior Enforcement Counsel, at (617) 918-1777. Respondent may seek federal judicial review of the AO pursuant to Section 307(b)(1) of the Clean Air Act, 42 U.S.C. § 7607(b)(1). Respondent may also request an opportunity to confer with EPA about this NOV/AO by contacting Jim Gaffey or Catherine Smith at the phone numbers listed above within seven (7) days of receiving this NOV/AO.

Sam Silverman, acting for
Susan Studlien, Director
Office of Environmental Stewardship
U.S. Environmental Protection Agency
Region 1 – New England

7-30-14
Date

U.S. EPA Small Business Resources Information Sheet

The United States Environmental Protection Agency provides an array of resources, including workshops, training sessions, hotlines, websites and guides, to help small businesses understand and comply with federal and state environmental laws. In addition to helping small businesses understand their environmental obligations and improve compliance, these resources will also help such businesses find cost-effective ways to comply through pollution prevention techniques and innovative technologies.

EPA's Small Business Websites

Small Business Environmental Homepage - www.smallbiz-enviroweb.org

Small Business Gateway - www.epa.gov/smallbusiness

EPA's Small Business Ombudsman - www.epa.gov/sbo or 1-800-368-5888

EPA's Compliance Assistance Homepage

[www.epa.gov/compliance/assistance/
business.html](http://www.epa.gov/compliance/assistance/business.html)

This page is a gateway to industry and statute-specific environmental resources, from extensive web-based information to hotlines and compliance assistance specialists.

EPA's Compliance Assistance Centers

www.assistancecenters.net

EPA's Compliance Assistance Centers provide information targeted to industries with many small businesses. They were developed in partnership with industry, universities and other federal and state agencies.

Agriculture

www.epa.gov/agriculture/

Automotive Recycling

www.ecarcenter.org

Automotive Service and Repair

www.ccar-greenlink.org or 1-888-GRN-LINK

Chemical Manufacturing

www.chemalliance.org

Construction

www.cicacenter.org or 1-734-995-4911

Education

www.campuserc.org

Food Processing

www.fpeac.org

Healthcare

www.hercenter.org

Local Government

www.lgean.org

Metal Finishing

www.nmfrc.org

Paints and Coatings

www.paintcenter.org

Printed Wiring Board Manufacturing

www.pwbrc.org

Printing

www.pneac.org

Ports

www.portcompliance.org

U.S. Border Compliance and Import/Export Issues

www.bordercenter.org

Hotlines, Helplines and Clearinghouses

www.epa.gov/epahome/hotline.htm

EPA sponsors many free hotlines and clearinghouses that provide convenient assistance regarding environmental requirements. Some examples are:

Antimicrobial Information Hotline

info-antimicrobial@epa.gov or
1-703-308-6411

Clean Air Technology Center (CATC) Info-line

www.epa.gov/ttn/catc or 1-919-541-0800

Emergency Planning and Community Right-To-Know Act

[www.epa.gov/superfund/resources/
infocenter/epcra.htm](http://www.epa.gov/superfund/resources/infocenter/epcra.htm) or 1-800-424-9346

EPA Imported Vehicles and Engines Public Helpline

www.epa.gov/otaq/imports or
734-214-4100

National Pesticide Information Center

www.npic.orst.edu/ or 1-800-858-7378

National Response Center Hotline -

to report oil and hazardous substance spills
www.nrc.uscg.mil or 1-800-424-8802

Pollution Prevention Information Clearinghouse (PPIC)

www.epa.gov/opptintr/ppic or
1-202-566-0799

Safe Drinking Water Hotline

[www.epa.gov/safewater/hotline/index.
html](http://www.epa.gov/safewater/hotline/index.html) or 1-800-426-4791

Stratospheric Ozone Protection Hotline

www.epa.gov/ozone or 1-800-296-1996